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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,920	08/22/2003	Ulrich Bahr	11150/32A	1948

26646 7590 11/12/2004

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EXAMINER

LOBO, IAN J

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/646,920	Applicant(s) BAHR ET AL.	
	Examiner Ian J. Lobo	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/762,456.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/22/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because the patent number of the parent 09/762,456 has not been inserted into the first paragraph of the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent to Truesdell et al ('975) taken in view of Brunius et al ('945) and Beymer ('726)

Truesdell et al discloses a device for detecting objects. The device includes a plurality of distance sensors (22a-22n), a microcontroller (60) configured to control each of the sensors and an output unit (11).

With respect to claim 1, it appears that the claims differentiates over Truesdell et al by claiming that the microcontroller is configured to apply to the distance sensors "an identifier". On col. 11, lines 1-10, Truesdell et al notes the problems of interference inherent in using a plurality of sensors in close proximity to each other. A solution

Art Unit: 3662

taught by Truesdell et al is the microcontroller may "vary the repetition rate of the transmitted sound pulse in a random fashion" to minimize interference with like sensors.

The Brunius et al patent describes a method for data collection whereby each sensor within broadcast range of the mobile unit sends its identification code and accumulated data a plurality of times by serially spaced transmission bursts. The time interval between successive transmission bursts of different sensors/transponders differs. All sensors respond to a common "wake-up" signal and immediately broadcast their transmission bursts of their identifier and accumulated data back to the mobile unit. This technique does not uniquely poll individual transponders. In order to minimize collision interference between signals of simultaneously transmitting devices, "the transponders change the active time and frequency parameters of their respective RF transmissions." In addition, the frequency for each transponder can also vary as a function of the unique identifier for a given transmission interval. Reference is also made to use of a randomizing function to determine time intervals and transmission frequencies for transponders. This technique is intended to avoid collisions between transmission bursts from the plural transmitting of other transponders by actively varying both the time interval and transmission frequency for each active transponder. Further, the patent to Beymer teaches (see claim 23) using identifiers in the art of vehicle anti-collision systems. Thus, in view of the interference suppression disclosed in Brunius et al and the well known use of identifiers in anti-collision systems, it would be obvious to one of ordinary skill in the art to modify the system of Truesdell et al by utilizing an

Art Unit: 3662

identifier as taught by Brunius et al and Beymer, so as to more fully suppress the interference between sensors. Claim 1 is so rejected.

Dependent claims 2-8 and 11 are further provided by the above combination of prior art.

4. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Truesdell et al in view of Brunius et al and Beymer as applied to claim 10 above, and further in view of the patent to Lissel et al ('273).

Claims 9 and 10 differ over the Truesdell et al system by claiming that the sensors are ultrasonic foil transducers. Truesdell et al specify generic ultrasonic sensors.

Lissel et al discloses a system for detecting objects wherein the sensors are ultrasonic foil transducers. Lissel et al teaches that such transducers are advantageous as distance sensors when used in an array because they are of low cost and can be mounted easily. In view of such advantages, it is obvious to one of ordinary skill in the art to substitute a foil transducer for the generic transducer of Truesdel et al.

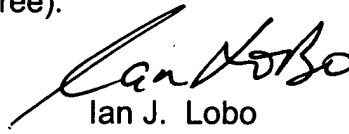
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian J. Lobo whose telephone number is (703) 306-4161. The examiner can normally be reached on Monday - Friday, 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on (703) 306-4171. The fax phone

Art Unit: 3662

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ian J. Lobo
Primary Examiner
Art Unit 3662

ijl